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The Honorable Mike Chrisman, Chair
California Ocean Protection Council
California Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Mr. Chairman:

It is exciting and refreshing to read the West Coast Governors' Agreement Discussion Paper. I would like to highlight two programs that are aligned with the goals of the Governors' Agreement on Ocean Health. Both have broad support in the ocean science community but have the potential to be expanded and strengthened to more quickly meet the goals of the three west coast Governors.

The Pacific Coast Ocean Observing System (PaCOOS)

The Governors' Agreement seeks a proactive approach for regional collaboration to protect and manage ocean and coastal resources on the west coast. Central to these management decisions will be a robust and sustained ocean observing system to measure the effects of human activities on marine ecosystems and to forecast the effects of climate fluctuations on the benefits, products, and services we derive from them.

PaCOOS (<http://www.pacoos.org>) – a collaborative ocean observing effort by NOAA, academic institutions (including Scripps Institution of Oceanography), foundations, state fisheries agencies, and other organizations in California, Oregon, and Washington – aims to provide the ocean information needed for the sustained use of fishery resources and protection of marine species and their ecosystem under a changing climate. PaCOOS builds on the long-term physical, chemical, and biological observations of the California Cooperative Fisheries Investigations (CalCOFI) and NSF-funded Long Term Ecological Research (LTER) program in the California Current Ecosystem, and integrates existing regional observing systems and surveys. Because the California Current Large Marine Ecosystem does not stop at international borders, PaCOOS has also developed mechanisms for collaboration with Canada and Mexico. Through its oceanographic observations, ecological products and evaluations, and public outreach activities, PaCOOS can directly respond to and assist with five of the seven priority areas in the Governors' Agreement:

2. Protect and Restore Ocean and Coastal Habitats
 - PaCOOS's physical and biological marine observations will support the assessment of the effects of climate variability on California Current Large Marine Ecosystem (CCLME). PaCOOS can also assist with identifying important ecological areas within the CCLME.
3. Promote the Effective Implementation of Ecosystem-based Management
 - This requires a regional research and monitoring program such as PaCOOS to gather, evaluate, and disseminate important data in a timely manner.

5. Increase Ocean Awareness and Literacy Among Citizens

- One of the key goals of PaCOOS is to keep the public continuously informed on the state of the changing ocean environment and its effect on natural resources and their ecosystem. The PaCOOS team shall also educate the public on the relevance, and significance of the observations being made.

6. Expand Ocean and Coastal Scientific Information, Research, and Monitoring

- This priority area calls for the development and implementation of a regional research and monitoring plan for the entire west coast to provide a framework for addressing the key management issues raised by the governors' agreement. PaCOOS fits this description.

7. Foster Sustainable Economic Development

- A main goal of PaCOOS is to provide the ocean information needed for the sustained use of fishery resources.

Scientists and administrators from the following institutions and organizations are involved in PaCOOS development and governance:

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| - California State University represented by Humboldt State University | - NOAA, NMFS, Northwest Fisheries Science Center |
| - Monterey Bay Aquarium Research Institute | - NOAA, NMFS, Southwest Fisheries Science Center |
| - Oregon State University | - NOAA, NOS, Coastal Services Center |
| - University of California represented by Scripps Institution of Oceanography, University of California San Diego | - NOAA, NOS, National Marine Sanctuaries Program |
| - University of Washington | - NOAA, OAR, Pacific Marine Environmental Laboratory |
| - CeNCOOS | - US Fish and Wildlife Service, Pacific Region |
| - NaNOOS | - US Geological Survey |
| - SCCOOS | - California Department of Fish and Game |
| - NOAA, NESDIS, National Satellite, Data, and Information Service | - Oregon Department of Fish and Wildlife |
| | - Washington Department of Fish and Wildlife |
| | - The North Pacific Marine Science Organization (PICES) |
| | - Point Reyes Bird Observatory |

Centers for Ocean Sciences Education Excellence (COSEE)

Priority area number five of the Governors' Agreement Discussion Paper, as mentioned above, is to increase ocean awareness and literacy among citizens. There are three NSF-funded Centers for Ocean Sciences Education Excellence (COSEE) on the west coast: COSEE California, in which Scripps Institution of Oceanography is an active participant; COSEE West; and COSEE Learning Communities. The COSEEs are promoting partnerships between research scientists and educators, disseminating best practices in ocean sciences education, and promoting ocean education for a more scientifically literate workforce and citizenry. Coordination by West Coast governments in developing common educational materials for public outreach would be a powerful tool in promoting ocean awareness and literacy. COSEE's Ocean Literacy Network – in which COSEE California is a key player - is a highly appropriate vehicle for such an endeavor.

I look forward to working with you in making the goals of the west coast Governors become a reality.

Sincerely,



Tony Haymet
SIO Director